IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A hierarchical storage device, comprising:

a library storage device configured to store realtime stream data in units of segments subdividing each realtime stream data;

a cache storage device configured to store selected segments among the segments stored in the library storage device;

a memory unit configured to store random access point segment information from which a possibility for each segment to contain a point that can potentially be random accessed in future can be estimated; and

a control unit configured to control a selection of the selected segments to be stored in the cache storage device according to the random access point segment information stored in the memory unit.

Claim 2 (Original): The hierarchical storage device of claim 1, wherein the control unit includes a discarding segment selection unit configured to select segments that are candidates for discarding from the cache storage device, among the selected segments stored in the cache storage device, according to the random access point segment information stored in the memory unit.

Claim 3 (Original): The hierarchical storage device of claim 1, wherein the control unit includes a storing segment selection unit configured to control whether or not a certain segment that is not stored in the cache storage device should be stored into the cache storage device, according to the random access point segment information stored in the memory unit for said certain segment.

Claim 4 (Original): The hierarchical storage device of claim 3, wherein the storing segment selection unit controls whether or not to store said certain segment into the cache storage device upon receiving a request to open data stored in the library storage device or the cache storage device, according to the random access point segment information for said certain segment which belongs to said data.

Claim 5 (Original): The hierarchical storage device of claim 1, wherein the control unit includes an update unit configured to update the random access point segment information for a segment containing a certain point on the realtime stream data upon receiving a seek request with respect to said certain point.

Claim 6 (Original): The hierarchical storage device of claim 1, wherein the control unit includes an update unit configured to update the random access point segment information for a segment containing a certain point on the realtime stream data according to a seek step from a position at which a seek pointer is located when a seek request with respect to said certain point is received to said certain point specified by the seek request.

Claim 7 (Original): The hierarchical storage device of claim 1, wherein the control unit includes an update unit configured to update the random access point segment information for a segment containing a start point of sequential accesses to the realtime stream data according to an amount of data that are sequentially accessed consecutively from a certain point on the realtime stream data.

Claim 8 (Original): The hierarchical storage device of claim 1, wherein the control unit includes an update unit configured to update the random access point segment information for a segment containing a certain point on the realtime stream data upon receiving a request for registering said certain point as a random access point.

Claim 9 (Original): The hierarchical storage device of claim 1, wherein the memory unit stores entries for candidate segments which should be judged as having a possibility of containing a point that can potentially be random accessed in future, and

the control unit includes an update unit configured to update the random access point segment information by adding/deleting an entry for each candidate segment into/from the memory unit.

Claim 10 (Original): The hierarchical storage device of claim 9, wherein the control unit realizes a referring to the random access point segment information of a referring target segment by judging whether the referring target segment contains a point that can potentially be random accessed in future or not according to whether or not an entry for the referring target segment is stored in the memory unit.

Claim 11 (Original): The hierarchical storage device of claim 1, wherein the memory unit contains a counter for each candidate segment indicating a likelihood of each candidate segment being judged as having a possibility of containing a point that can potentially be random accessed in future, and

the control unit includes an update unit configured to update the random access point segment information by updating a value indicated by the counter for each candidate segment in the memory unit.

Claim 12 (Original): The hierarchical storage device of claim 11, wherein the control unit realizes a referring to the random access point segment information of a referring target segment by judging whether the referring target segment contains a point that can potentially be random accessed in future or not according to whether or not a value of the counter for the referring target segment is not less than a prescribed threshold.

Claim 13 (Original): The hierarchical storage device of claim 11, wherein the control unit has a plurality of conditions regarding update of the random access point segment information, and determines an increment of the counter to be used by the update unit at a time of updating the random access point segment information according to one of the plurality of conditions that is applied in updating the random access point segment information of each candidate segment.

Claim 14 (Original): The hierarchical storage device of claim 11, wherein the control unit realizes a referring to the random access point segment information of a referring target segment by directly referring to the random access point segment information of the referring target segment information of the referring target segment stored in the memory unit.

Claim 15 (Original): The hierarchical storage device of claim 1, wherein the random access point segment information is stored into the memory unit, either when a start point of sequential accesses to the realtime stream data satisfies a prescribed condition by which the start point can be estimated as a desired random access point of a user or when a request for registering a point on the realtime stream data as a random access point is received, or both.

Claim 16 (Original): A method for controlling a hierarchical storage device formed by a library storage device storing realtime stream data in units of segments subdividing each realtime stream data and a cache storage device storing selected segments among the segments stored in the library storage device, the method comprising the steps of:

storing random access point segment information from which a possibility for each segment to contain a point that can potentially be random accessed in future can be estimated; and

controlling a selection of the selected segments to be stored in the cache storage device according to the random access point segment information stored by the storing step.

Claims 17-20 (Canceled).